



Evergreen Trees for Screens and Hedges in the Landscape

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Screens and hedges are a popular way to create privacy or hide an undesirable view. They can be anything from a section of a fence to individually designed panels, brick walls or a wall of green plant material. Plantings are usually a less expensive way to create privacy than a fence or wall. Screens or hedges also offer additional advantages to many landscapes other than privacy. For example, they can frame a terrace or provide a backdrop to a herbaceous garden or other garden features.

Screens are loosely defined as evergreen, with dependable growth habits which mature at about shoulder height. Evergreen plants with low-branching habits and dense foliage are most effective for screening and providing the most privacy, especially in winter. In neighborhoods with small lots, interplanting with evergreens and deciduous plants offers a more interesting landscape than a single row of evergreen trees and shrubs.

Choose plants carefully, paying particular attention to ease of maintenance and the desired effect. For a formal look, plants must be clipped, which is time-consuming and an often-repeated task. An informal, more natural appearance can be obtained with less maintenance using evergreen and deciduous plants. These plants can also provide other desirable landscape qualities such as flowering, showy fruit, fall leaf color and a variety of canopy forms. Also, consider the mature size of the plants compared to the areas in the landscape. In an area where space is limited, like a side yard, use narrow or fastigiate (upright) tree forms. These will provide the necessary height needed for screening, but will not overpower the width of the area.

A mixture of plants such as small flowering trees, evergreen trees and shrubs creates great eye appeal and will ensure against a total loss if there is a disease or insect problem with one of the species. If fast-growing plants



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Leyland Cypress is a fast-growing evergreen plant for a screen or hedge.



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Hollies, Dwarf Burford and Nellie R. Stevens, are effective for screening with their low-branching habits and dense foliage.

(i.e. Lombardy poplar, white pine) are used for an instant screen, be aware that many are weak-wooded and short-lived. An interplanting of longer-lived species (i.e. holly, arborvitae) will fill in the vacant spots when the fast growing plants die or are removed.

To reduce noise

Screens and hedges also provide noise reduction, especially in urban areas where noise is easily refracted from hard surfaces like pavements or buildings. Plants are better at absorbing high-frequency sounds, which are most bothersome to human ears, than they are at absorbing low-frequency sounds. Noise is measured in decibels (on a logarithm scale) and is best reduced when plants are placed in two or three rows. For instance, 2 feet of plant width can decrease the decibel level by four, while increasing the plant width with two or three plants can lower the noise level more than seven decibels. Some examples of noise levels: people talking measures about 30-60 decibels, large trucks average 60-80 decibels and jet airplanes create more than 120 decibels.

Low-growing plants, like shrubs, should be planted adjacent to the noise, with larger, taller plants immediately behind them. A third row can be a selection of highly desirable shrubs that will face toward the living area or garden. These plants should provide showy flowers, good fall color or attractive bark. Evergreen plants are the best choice,

due to their dense branching habit and year-around noise protection.

An excellent approach to noise reduction is to develop an earthen berm about 3-4 feet high. The sides of the berm can slope about 5-20 percent, with an optimal slope of 10 percent. A combination of desired species can be planted on the top of the berm and along the sides. The combination of the berm and plant material can reduce the noise level 6 to 15 decibels, which the human ear will perceive as one-third to one-half as loud.



Planting on an earth berm can provide privacy as well as noise reduction.

Evergreen Trees Ideal for Screening

Botanical Name	Common Name	Height Spread	Hardiness in Tennessee	Comments
<i>Abies concolor</i>	White Fir, Concolor Fir	30-50' 15-30'	All Tenn.	One of the best firs for Tennessee due to heat and drought tolerance. This fir prefers well-drained, sandy-loam soils; dislikes heavy clay soil. Full sun is preferable, but can tolerate light shade.
<i>Cryptomeria japonica</i>	Japanese Cryptomeria	35-45' 15-20'	All Tenn.	Rich green foliage; may have a bronzy hue in winter. Bark is beautiful reddish brown and peels off in long strips. 'Yoshino' is the best known of all the cultivars.
<i>x Cupressocyparis Leylandii</i>	Leyland Cypress	35-40' 15-20'	All Tenn.	Fast growing. Excellent screening potential. Some fungal diseases have been reported. Many selections are available, including one with variegated foliage. Plant may be stressed in dry sites.
<i>Ilex aquifolium x I. cornuta</i> 'Nellie R. Stevens'	Nellie R. Stevens Holly	15-25' 10-15'	Marginal in East Tenn.	Sun or shade. Grows as a large shrub or small pyramidal tree. Lustrous green leaves and fast growing.
<i>Ilex latifolia</i>	Lusterleaf Holly	15-20' 15-20'	Marginal in East Tenn.	Large pyramidal tree and one of the best broad-leaved evergreens. Needs a well-drained soil. 'Mary Nell' is a popular cultivar that sets great quantities of red berries.
<i>Ilex opaca</i>	American Holly	20-30' 15-20'	All Tenn.	Native. Sun or shade exposure, but prefers some shade. More than 1000 cultivars are listed. Good drainage is essential. Only the female produces berries, but a male plant is required for pollination. Free of most insect pests and diseases.

Evergreen Trees Ideal for Screening

Botanical Name	Common Name	Height Spread	Hardiness in Tennessee	Comments
<i>Ilex x attenuata</i> 'Fosteri 2'	Foster Holly	10-15' 10-15'	All Tenn.	Sun or shade exposure. The branching habit is naturally conical and dense, but responds to shearing in a more formal landscape. 'Foster #2' is the female and produces an abundance of berries. 'Foster #4' is a male holly.
<i>Ilex x attenuata</i> 'Savannah'	Savannah Holly	20-25' 15-20'	All Tenn.	Pyramidal canopy form, with light green foliage. Popular due to the abundance of large red fruits.
<i>Juniperus chinensis</i>	Chinese Juniper	10-50' 5-15'	All Tenn.	Many juniper selections are available with upright growth habits. Foliage color may vary from green to blue-green and gray. Junipers perform best in full sun and in well-drained soil.
<i>Juniperus scopulorum</i>	Rocky Mountain Juniper	30-40' 3-15'	All Tenn.	A slow-growing, narrow pyramidal form that often has several main stems. Withstands drought conditions, and needs well-drained soil. Several cultivars are available, and valued for their bluish cast of the foliage.
<i>Juniperus virginiana</i>	Eastern Red Cedar	20-40' 10-20'	All Tenn.	Native. Tough tree, grows in a wide range of soil conditions. Likes full sun. An excellent specimen plant or used in a mass. Provides food and shelter for birds. Many cultivars offer a palette of foliage color, fruit and canopy forms.
<i>Magnolia grandiflora</i>	Southern Magnolia	25-45' 10-50'	Select most cold hardy selections.	Native. Allow lower branches to grow to the ground. Large, fragrant white flowers in summer. Dwarf selections, 'Little Gem' and 'Hasse', are better suited for small landscapes.
<i>Magnolia virginiana</i>	Sweet Bay Magnolia	10-20' 10-20'	All Tenn.	Native. Can be grown as a single trunk or multi-trunk tree. Showy white, lemon-scented flowers in summer. Foliage is semi-evergreen, with a shiny, green surface and silvery beneath. <i>Magnolia virginiana</i> var. <i>australis</i> holds its foliage through winter. The cultivar 'Henry Hicks' offers excellent shiny evergreen foliage.
<i>Pinus strobus</i>	Eastern White Pine	50-80' 20-40'	All Tenn.	One of the fastest growing pines in the landscape. There is great variation in pines due to seed-produced plants. Best grown in full sun on fertile, moist, well-drained soil.
<i>Prunus caroliniana</i>	Cherry Laurel	25-30' 20-35'	Marginal in East Tenn.	Native. Broad-spreading canopy makes an ideal multi-trunk tree. Dense foliage, often pruned into a formal hedge. 'Bright 'N Tight' is a compact form.
<i>Thuja occidentalis</i>	Eastern Arborvitae	35-40' 15-25'	All Tenn.	Good as a specimen plant or massed in hedges. Choose superior cultivars, many of which have pyramidal or rounded canopy forms.
<i>Thuja plicata</i>	Western Red Cedar (Arborvitae)	35-40' 15-25'	All Tenn.	Fast-growing, upright conifer which can be substituted for the over-used Leyland Cypress. Prefers moist, well-drained soil in full sun or part shade. 'Hogan' is the most upright cultivar with good green winter foliage and 'Giganteoides' is a hybrid form with incredible vigor.
<i>Tsuga canadensis</i>	Canadian Hemlock	35-70' 25-35'	All Tenn.	Makes a graceful hedge or specimen planting. Requires moist soil with good drainage. May need some wind and sun protection if used in West Tenn. Many selections include canopy forms that are prostrate, globose (rounded) or weeping.
<i>Tsuga caroliniana</i>	Carolina Hemlock	35-50' 20-25'	All Tenn.	Noted to perform better in urban conditions, but grows slower than Canadian Hemlock. Plants tend to be stiffly branched. Harder to find in the nursery trade.

Spacing requirements

When planting a screen or hedge, allow adequate spacing for the plants to thrive in a healthy environment and provide the desired privacy. Listed below are some general guidelines for spacing plants in a hedge. Placing the plants in a triangular pattern increases the area's depth and has more appeal than placing the plants in a single straight row. A screen may be necessary to hide utility mounts and distribution transformers in your neighborhood. Plant screening material at least 6 feet away from utility equipment on three sides and 12 feet away on the door or entrance side. When plants reach maturity, utility workers can still safely maintain the equipment.



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Juniperus chinensis 'Spartan' a fast-growing columnar juniper ideal for use as a screen.

	Spacing Between Plants	Height after 5 years, assuming a 3-gallon plant was installed
Canadian Hemlock	5-7'	10-12'
Eastern Red Cedar	5-7'	10-15'
Foster Holly #2	4-6'	12-15'
Leyland Cypress	5-7'	10-15'
Little Gem Magnolia	5-7'	8-10'
Nellie R. Stevens Holly	4-6'	10-12'
Savannah Holly	5-7'	10-15'

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